UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,171	12/21/2001	Agapios K. Agapiou	1999U024D1.US	9429

25959 7590 12/10/2004

UNIVATION TECHNOLOGIES LLC
5555 SAN FELIPE, SUITE 1950
HOUSTON, TX 77056

EXAMINER	
PASTERCZYK, JAMES W	
ART UNIT	PAPER NUMBER
1755	

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/026,171	AGAPIOU ET AL.	
	Examiner	Art Unit	
	J. Pasterczyk	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2004 and 19 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12 and 14-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 14-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/14/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. This Office action is in response to the request for an RCE withdrawing the Appeal, the IDS, and the preliminary amendments filed 10/14/04 and 10/19/04.

2. Claims 5, 6, 9, 23, 24, and 26 are objected to because of the following informalities: in claim 5, l. 3, remove the parentheses and change "selected from one of" to --an--; in the next line insert --a-- before "modified". In claim 6, the penultimate line should read in part --the optionally heated--. In claim 9, l. 3, change "selected from one of" to --an--; in the next line insert --a-- before "modified". Claim 29 should be amended similarly. In claim 23, last three lines, change "selected from one of" to --an--; in the next line insert --a-- before "modified"; in l. 4 change the first comma to --and-- and delete the second comma; in l. 10 delete the first comma and change "may be" to --is--. In claim 24, l. 3, insert --each-- after "where" and change ", a radical group which is" to --a--; in the penultimate line make "where in" one word. In claim 26, last three lines, change "selected from one of" to --an--; in the next line insert --a-- before "modified". Appropriate correction is required.

3. Claims 6, 14, 22-25 and 27-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 6, 14, 22, and 27-29, it is not clear what is meant by "introducing", particularly since some of these claims also include a later step of "combining" two ingredients, or no further step at all. If two ingredients are combined, it should be recited that simply.

In claim 23, if A is as recited, then they all would appear to have dangling valences from them. In addition, the recitations of A in further dependent claims 24 and 25 would be contrary to the limitation in claim 23.

In claim 29, the first step would be better phrased as first consisting essentially of the alumoxane, followed by either of the specific metallocenes recited. Step (b) makes no sense since "heating" cannot consist essentially of a temperature, though something can be heated to that temperature.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 10-12, 14-16 and 18-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Razavi et al., WO 96/35729 (hereafter referred to as Razavi I).

Razavi I discloses the invention as claimed (abstract; p. 2, l. 15 to p. 3, l. 6; p. 3, l. 20-35; example 1; table 1).

6. Claims 1-7, 10-12, 14-16 and 18-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Razavi, USP 5,914,289 (hereafter referred to as Razavi II).

Razavi II discloses the invention as claimed (abstract; col. 2, l. 6-19; col. 4, l. 4-18, l. 31-35, l. 41-59; col. 5, l. 19-24).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-12 and 14-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Razavi I and Razavi II as cited above.

The disclosures of Razavi I and II have been discussed above. Both are essentially identical with the distinction that Razavi II has a lower high end temperature for the step of combining the metallocene (with or without a cocatalyst) with the carrier.

Neither of Razavi I or II discloses use of a mineral oil slurrying agent for the prepared supported catalyst, the preferred metallocenes of the present invention, or combining the metallocene and cocatalyst at the preferred higher temperature range of the present invention.

However, each of these modifications would have been well within the skill of the routineer in the art to achieve with only minimal experimentation.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosures of either of Razavi I or II with a reasonable expectation of obtaining a highly-useful method of making a supported catalyst with the expected benefit of less sheeting and fouling of the reactor using said catalyst.

9. Applicant's arguments filed 10/14/04 have been fully considered but they are not persuasive. Reacting the metallocene or metallocene/activator combination with the carrier at an elevated temperature necessarily entails the metallocene or metallocene/activator combination being at that elevated temperature during the combining, hence immediately before the combining it would seem they must be at that elevated temperature. The current claims also do not require that the metallocene and activator be separately heated before they are reacted together, presumably at that or some other elevated temperature. Instead, they only require that

the mixture of the two be heated, and even then the claims do not necessarily require that the combining of the metallocene (with or without activator) with the carrier itself take place at an elevated temperature for both or either of these ingredients. Both Razavi I and II disclose heating the metallocene and cocatalyst to one temperature, followed by a separate step of combining that mixture with a carrier at another temperature, the other temperature generally overlapping with the temperatures recited in the present claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Pasterczyk

AU 1755

12/4/04

Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700